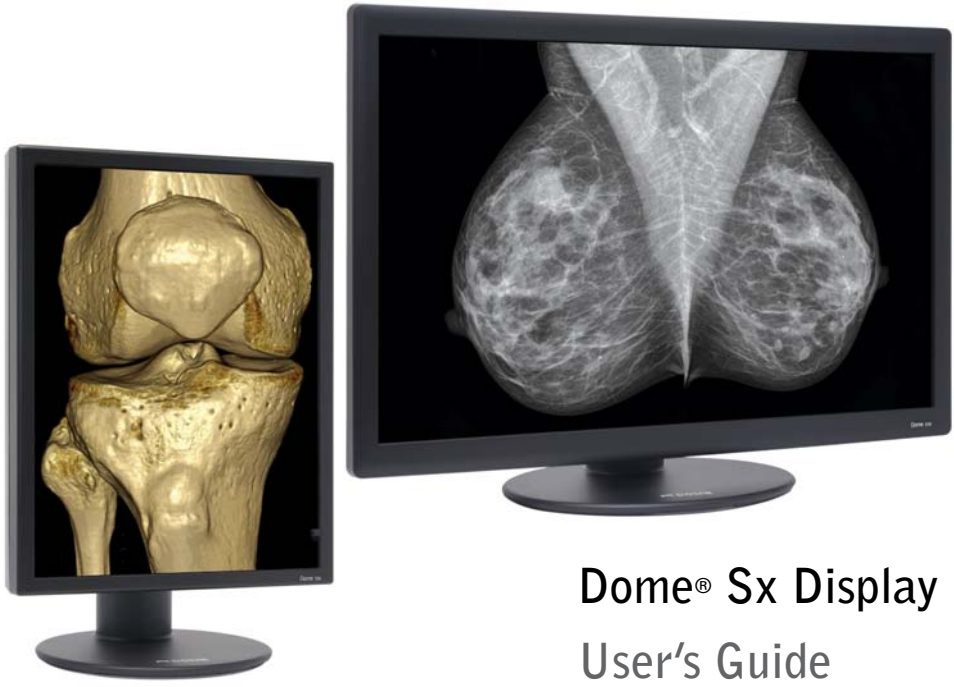
DOME®
by NDSsi



Dome® Sx Display

User's Guide

CE 0197

Dome S3c Display
Dome S10 Display

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Display Package Contents

The Dome S10 display, shown here for illustrative purposes. Your display package may contain a Dome S3, Dome S3c, Dome S6c, or Dome S10 unit.

DC power adapter

Power cord

DVI cable

DisplayPort cable

Mini USB cable

Quick reference

NOTE: DVI-to-DVI and DisplayPort cables ship in the Dome S3 and Dome S3c display packages. DVI-to-DVI cables ship in the Dome S6c display package. DVI and mini USB cables ship in the Dome S10 display package.

About the Display

The Dome® Sx display systems, available in 3, 6, and 10 megapixels, consist of a TFT LCD panel and a graphics board and driver.The display's thin film transistors, in a transmissive-type display, use an integrated cold cathode fluorescent tube (CCFT) backlight system. The new model of the Dome S3c display and the Dome S6c display both use an LED backlight system.

The display is designed for medical imaging in diagnostic settings and comes fully tuned with gamma correction that complies with the DICOM Part 14 Standard. The all-digital design enables the display to produce the sharp, crisp images critical to softcopy medical viewing. Unwanted analog display image artifacts are eliminated.

For display classification and use; environmental guidelines; safety precautions; handling, cleaning and storage tip; and specifications, see "Technical Information" on page 12.

System Requirements

- Windows 7 (x86 or x64) or Windows XP Service Pack 3 (x86 or x64)
- Intel or AMD multi-core processor
- PCI Express x16 lane slot
- 50 MB hard disk space
- 512 MB RAM
- CD-ROM drive
- Power supply, 350 watts or greater

Related Documents

ITEM	ITEM NUMBER	DESCRIPTION
Dome CXtra Quick Reference	020-0914-xx	Quick reference booklet that covers installation of CXtra calibration software and describes DICOM, AAPM TG18, DIN, and MQSA quality control functions. (Printed material in Dome CXtra CD 015-0081-xx envelope.)
Dome CXtra User's Guide	020-0911-xx	In-depth user's guide that covers installation and configuration of CXtra calibration software and use of DICOM, AAPM TG18, DIN, and MQSA quality control functionalities. (PDF file on Dome CXtra CD 015-0081-XX.)
MQSA Quality Control Manual	020-0517-xx	Instructional guide for performing mammography quality control tests on Dome 5MP and 10MP displays. (PDF file on Dome CXtra CD 015-0081-XX.)
Graphics Board & Driver Installation Quick Reference	020-0940-xx	Quick reference booklet for installation of graphics board and driver. (Printed material in Dome Display Driver CD 012-0043-XX envelope.)

Display Components

Review the following illustrations to identify controls and ports on the front and back panels of the Dome Sx displays.

Front sensor on Dome S3/Dome S3c

MQSA button on Dome S10

The sensor on the front of the Dome S3, Dome S3c, and Dome S6c displays allows you to run an auto-conformance test without using the photometer.

On the S3 series the sensor is located on the side bezel as shown in the preceding illustration.

On the Dome S6c display, the sensor is underneath the front bezel at the bottom center.

The MQSA (Mammography Quality Standards Act) button (lower right, beneath display ID) on the Dome S10 display facilitates any daily, weekly, or annual tests that you have preset via calibration and monitoring software.

Dome S3/Dome S3c connector plate

Dome S6c connector plate

Dome S10 connector plate

The Dome Sx displays include the following components on the connector plate.

- Power input.
  - On Dome S3, drives power to the display via an 8-pin DIN connector. The power input is 12V ±5% (130 W).
  - On Dome S3c, Dome S6c, and Dome S10, drives power to the display via a 6-pin DIN connector. The power input is 24V ±5% (150 W).
- USB port.
  - Dome S3/Dome S3c uplink B port. Usage to be defined at a future time.
  - Dome S6c mini AB port. For service use only.
  - Dome S10 uplink mini-B port. Usage assigned for MQSA button functionality.

- Video input. Drives the data to the display.
  - Dome S3 and Dome S3c displays each offer two video connector options: a DVI connector or a DisplayPort connector.
  - Dome S6c and Dome S10 displays each offer two DVI connectors. (NOTE: For the Dome S6c display, a DisplayPort 1.1 video output port and a DisplayPort 1.2 video input port are future features.)
- Reset button. Restores the display configuration to default setting.
- LED lights. Provides information on the status of the display.
- Network connection port. Future feature of the Dome S6c display.

Installing the Display

First, turn your computer off. Next, leave the power cord plugged into the grounded outlet. Then install the Dome Sx display using only the power adapter and video cable that shipped with the unit.

WARNING

No modification of this equipment is allowed.

In locations where 240V outlets are used, connect the Dome Sx display only to a center-tapped, 240V, single-phase supply (for Canada and the United States only).

Connecting the Video Cable and Power Cord

IMPORTANT! Note the following:

- For the Dome S3 or Dome S3c display only: Install either the DVI or the DisplayPort cable, not both.
- If the power adapter that came with your display unit has an on/off switch, after installation, turn on the adapter before you turn on the computer.

To connect the cables

1 Plug the power cord of the adapter into the power input port on the connector plate, then plug the other end into the input socket of the adapter. Plug the power supply cord into a grounded AC outlet.

2 Plug one end of the video cable into the primary video port on the connector plate and secure the connection. Plug the other end of the cable into the video port on the installed graphics card and secure the connection. Repeat this step for a secondary video cable installation.

3 Turn on the adapter power before you turn on the computer.

Video Cable Installation on Dome S6c and Dome S10 Displays

For both the Dome S6c and the Dome S10 displays, connect the primary output from the graphics board (the bottom port) to the primary input of the Dome S6c and the Dome S10 displays. (See following illustration for the location of the primary input port on the connector plate of each display.) Improper connection may cause VGA boot messages not to appear on the display screen.

Primary video signal input on the Dome S6c connector plate

Primary video signal input on the Dome S10 connector plate

Technical Information

The design of the Dome® Sx digital display takes into account every known measure to ensure your personal safety. Improper use of the display can result in electric shock, fire, or damage to the display. Read all instructions before setting up the display.

Classification

Shock Protection: Class I.

Degree of Protection Against Electric Shock: No applied part.

Degree of Protection Against Harmful Ingress of Water: Ordinary equipment (IPX0).

Degree of Safety in the Presence of Flammable Anaesthetic Mixture with Air or with Oxygen or Nitrous Oxide: Not suitable for use in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide.

Mode of Operation: Continuous.

No applied part.

Important recycle instruction

HAZARDOUS SUBSTANCE. Lamp(s) inside this product contain mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal laws. For more information, contact the Telecommunications Industry Association at WWW.ECYCLINGCENTRAL.COM. For lamp-specific disposal information, check WWW.LAMPRECYCLE.ORG.

DISPOSAL. Do not use household or municipal waste collection services for disposal of electrical and electronic equipment. EU countries require the use of separate recycling collection services.

ENVIRONMENT-FRIENDLY USE PERIOD. Hazardous substances are present. The number encircled by the recycling symbol indicates the safe-use period (in years). China requires the use of recycling services at the end of product life.

Symbol explanations

READ DOCUMENTATION. Follow operating instructions or consult instructions for use.

MANUFACTURER.

DATE OF MANUFACTURE.

SERIAL NUMBER.

AUTHORIZED REPRESENTATIVE. European Community.

DANGEROUS VOLTAGE. Important precautions about electric shock. Read the accompanying text carefully, to prevent damage to display components and to guard your safety.

DIRECT CURRENT.

BAROMETRIC PRESSURE. Transport and storage 12,000 meters (39,400 feet), maximum in unpressurized container.

RELATIVE HUMIDITY. Transport and storage 5% to 90% (noncondensing) for Dome S3, Dome S3c, and Dome S10 displays; 10% to 90% (noncondensing) for the Dome S6c display.

TEMPERATURE. Transport and storage -20° to 60° C.

WARNING.

The Dome S series offers AMLCD units designed for viewing medical X-ray images. A Dome Sx display should not be used near patients and should be kept outside of 1.5 m perimeter and 2.29 m vertical.

Intended use

Dome Sx line, models Dome S3, Dome S3c, and Dome S6c are intended for use in displaying and viewing radiography images for review, analysis, and diagnosis by trained medical practitioners.

Dome Sx line, model Dome S10 is intended for use in displaying and viewing radiography images for review and analysis by trained medical practitioners and for use in mammography display systems.

WARNING! In the Dome S series, only the Dome S10 display can be used for review and analysis in mammography. Do not use the Dome S3, Dome S3c, or Dome S6c display in mammography diagnosis.

Federal law restricts this device to sale by or on the order of a medical practitioner.

Safety precautions

External equipment intended for connection to signal input, signal output, or other connectors, must comply with the relevant IEC standard (EN 60601-1:2006 and IEC 60601-1:2005 series for medical electrical equipment). In addition, all such combinations (systems) must comply with the standard IEC 60601-1:2005, *Safety requirements for medical electrical systems*.

Equipment not complying to IEC 60601-1:2005 must be kept outside the patient environment, as defined in the standard as at least 1.5 meters from the patient or the patient support.

Any person who connects external equipment to signal input, signal output, or other connectors has formed a system and is therefore responsible for the system to comply with the requirements of IEC 60601-1:2005. If in doubt, speak with a qualified technician.

The power cord is the only disconnect device that allows you to cut power from the AC main. Position the display in order to operate the disconnect device without difficulty.

Never touch the display and the patient at the same time.

WARNING! No modification of this equipment is allowed.

Safety tips

- Never open the display case, even when the power is off. Dangerous voltage inside may cause electric shock or death.
- To avoid damage to the display, use the grounded power supply and video cable supplied by NDSsi, or use certified replacements.
- Be sure the display is electrically grounded. You must connect the third grounding pin on the US power cord to a grounded outlet. The European power cord does not have a third grounding pin, but it must be plugged into a grounded outlet.
- If you cannot insert the plug into the outlet you plan to use, have a licensed electrician replace the outlet with a properly grounded outlet. If the power cord connects directly into the computer, make sure the computer is grounded.
- Keep the display dry if it is part of a surgical system. The display lacks protection against liquids or spills.
- **In locations where 240V outlets are used, connect the Dome Sx display only to a center-tapped, 240V, single-phase supply (for Canada and the United States).**

GROUNDING RELIABILITY CAN ONLY BE ACHIEVED WHEN EQUIPMENT IS CONNECTED TO AN EQUIVALENT RECEPTABLE MARKED “HOSPITAL ONLY” OR “HOSPITAL GRADE.”

WARNING! TO AVOID THE RISK OF ELECTRIC SHOCK, THIS EQUIPMENT MUST ONLY BE CONNECTED TO A SUPPLY MAINS WITH PROTECTIVE EARTH.

MAKE THE POWER SUPPLY CONNECTIONS FIRST, BEFORE YOU PLUG IN ANY OTHER CABLES. THEN DISCONNECT THE POWER SUPPLY LAST, AFTER YOU UNPLUG ALL OTHER CABLES.

Unpacking and handling tips

The Dome Sx display is a precision instrument that requires proper care to maintain product operation and adherence to specification. Unpack the display and components carefully, then set up and handle the unit properly to avoid damage to the LCD panel.

- Use both hands to grasp the display case when lifting it from the shipping carton, but avoid touching the screen.
- Do not apply pressure to the screen or touch the screen with bare fingers or objects. Pressure can affect image quality. Cosmetics and oils on the skin are both detrimental to the screen and difficult to remove.
- Allow the display to warm up to room temperature before turning it on. Avoid sudden temperature changes in the environment, as this may cause condensation, which damages the display.
- Secure the display properly onto a standard VESA 100-mm mounting unit if you elect not to use the desk stand.
- Do not set up the display near strong light or heat sources.
- Do not block the vents on the back of the display or install the display in a built-in enclosure. Blocked vents cause excessive heat to build up inside the display, increasing risk of fire.
- When installing components, turn off your computer, but leave it plugged into a grounded outlet.
- Do not remove the back cover or disassemble the display. There are no user-serviceable parts inside.

Preventing fire and injury

- Replace the power supply or cables if damaged.
- Use only the power source indicated in this guide or listed on the display.
- Do not plug the power supply into an overloaded AC outlet or extension cord. Overloaded AC outlets and cords can result in electric shock or fire.
- Do not drop or push objects into the display case. Internal components contain high voltage.
- Unplug the power cord from the wall outlet during thunderstorms.
- Do not place magnetic devices, such as motors, near the display.

Cleaning the display

Observe the following guidelines to maintain the display and the LCD screen.

- Use a clean, lint-free, absorbent cotton cloth to clear off any residual glue from removal of the protective film or to remove surface dust. Apply light pressure to remove the dust.
- Dampen a clean cloth with a small amount of isopropyl alcohol to remove glue or dust if the screen is still not clean. Do not saturate the cloth; otherwise, alcohol may seep into the display case and collect in the enclosure. Use a clean, dry cloth to completely remove the alcohol residue.
- Do not use chemically treated dust cloths, acetone, toluene, or harsh solvents on the display case or the screen. They can damage the polarizer and the display case.
- Do not expose the display to water or excessive moisture. Do not allow water or other stains to stand on the unit. Wipe liquids off immediately to prevent damage to the display case and the screen.

WARNING! DISCONNECT SUPPLY BEFORE SERVICING

AVERTISSEMENT
COUPER L'ALIMENTATION AVANT L'ENTRETIEN ET LE DEPANNAGE

Shipping/storing the display

Keep the display in its shipping container until installation. Return the display to its original container whenever you need to store the unit, move it to another location, or return it for repair. The packaging supplied by the manufacturer protects the display while it is in transit. See environment specifications for more information.

Before returning the display to the container, do the following:

1 Swivel the display panel to landscape mode.

2 Push the panel down to the lowest position.

3 Use the stand lock to anchor the panel.

Disposal information

Follow your local governing ordinance and recycling policy for proper disposal or recycling of display components.

Dome S3 Specification

In locations where 240V outlets are used, connect the Dome S3 display to a center-tapped, 240V, single-phase supply only (for Canada and the United States).

Category	Characteristic Item	Specification
LCD	Technology	TFT AMLCD Dual Domain IPS, 3 subpixels per pixel
	Screen size, diagonal	541 mm (21.3 in.)
	Display resolution	1536 x 2048 pixels (portrait) 2048 x 1536 pixels (landscape)
	Pixel pitch	211.5 μm, 120 DPI
	Viewing angle	176° horizontal/vertical
	Response time (Tr+Tf)	27 ms (typical)
	Refresh rate	60 Hz
Optical	Brightness	1450 cd/m^2 (typical)
	Contrast ratio	900:1 (typical)
	DICOM LUT	16-bit architecture with 0.2 JND precision
	Colors supported	Up to 1024 shades of gray, programmable gamma from palette of up to 3061 shades
	Pixel arrangement	LCR vertical stripe
Interface	Display control -brightness/ contrast	DDC2B+
	Display identification	EDID read using DDC2B+
	Display status	Dual-stack tricolor LEDs on back panel
Panel Connectivity	Video input	DisplayPort 1.1 and Dual Link DVI-D
	Pixel data sizes	8-bit, 10-bit per pixel grayscale, 24-bit color mapped to luminance
	VGA compatibility	640 x 480 to 1280 x 1024
	USB interface	USB B upstream port
Physical	Display size (without stand), H x W x D	475 mm x 363 mm x 99 mm (18.7 in. x 14.3 in. x 3.9 in.)
	Display weight (without stand)	6.4 kg (14 lb)
	Display weight (with stand)	9.3 kg (21 lb)
	Mounting options	100 x 100 mm VESA mounting standard. Desktop stand includes height, pivot, swivel, and tilt adjustment.
Power Requirement	Adapter	BridgePower BPM130S12F02 (with power switch) (CAUTION: Use only the adapter supplied with unit.)

Power Supply

WARNING: Use only the power adapter supplied with the Dome S3 display unit; the BridgePower BPM130S12F02 (130W) model.

Category	Characteristic Item	Specification
Power input requirements	Voltage selection	Universal auto switching with medical approvals and PFC
	Voltage	100–240V AC
	Current	3.0 A (3.0–1.5 A)
	Frequency	50–60 Hz
Power output requirements	Voltage	12 V DC ±5%
	Current	10.8 A (130 W)
Power consumption	Wattage	70 W (typical)
Physical	Size	228.6 mm x 76.2 mm x 50.8 mm (9 in x 3 in x 2 in)
	Weight	1.3 kg (2.75 lb)

Reliability

Characteristic item	Specification
Display	MTBF > 50,000 hours
Backlight	MTBF 50,000 hours to 50% brightness with backlight on continuously

Environment

Characteristic item		Specification
EMI shielding		No emission of low-level radiation
Temperature	Operating range	10° C ~ 40° C
	Storage range	-20° C ~ 60° C
Humidity	Operating range	30% ~ 75% Relative Humidity (noncondensing)
	Storage range	5% ~ 90% Relative Humidity (noncondensing)
Altitude	Operating	2,000 m (6,560 ft) maximum
	Transport/storage	12,000 m (39,400 ft) maximum in unpressurized container

Dome S3c Specification

In locations where 240V outlets are used, connect the Dome S3c display to a center-tapped, 240V, single-phase supply only (for Canada and the United States).

Category	Characteristic Item	Specification
LCD	Technology	TFT AMLCD Dual Domain IPS, 3 subpixels per pixel
	Screen size, diagonal	541 mm (21.3 in.)
	Display resolution	1536 x 2048 pixels (portrait) 2048 x 1536 pixels (landscape)
	Pixel pitch	211.5 μm, 120 DPI
	Viewing angle	176° horizontal/vertical
	Response time (Tr+Tf)	40 ms LED backlight (typical) 24 ms CCFL backlight (typical)
	Refresh rate	60 Hz
Optical	Brightness	800 cd/m^2 (typical)
	Contrast ratio	1400:1 LED backlight (typical) 750:1 CCFL backlight (typical)
	DICOM LUT	16-bit architecture with 0.3 JND precision
	Colors supported	Up to 1.06 billion colors; up to 1024 shades of gray, programmable gamma from palette of up to 2041 shades
	Pixel arrangement	R,G,B vertical stripe
Interface	Display control -brightness/ contrast	DDC2B+
	Display identification	EDID read using DDC2B+
	Display status	Dual-stack tricolor LEDs on back panel
Panel Connectivity	Video input	DisplayPort 1.1 and Dual Link DVI-D
	Pixel data sizes	8-bit, 16-bit, 24-bit, and 30-bit per pixel color*
	VGA compatibility	640 x 480 to 1280 x 1024
	USB interface	USB B upstream port
Physical	Display size (without stand), H x W x D	475 mm x 363 mm x 99 mm (18.7 in. x 14.3 in. x 3.9 in.)
	Display weight (without stand)	6.4 kg (14 lb)
	Display weight (with stand)	9.3 kg (21 lb)
	Mounting options	100 x 100 mm VESA mounting standard. Desktop stand includes height, pivot, swivel, and tilt adjustment.
Power Requirement	Adapter	BridgePower BPM150S24F05 (with power switch) (CAUTION: Use only the adapter supplied with unit.)

* 30-bit color is supported on DisplayPort only.

Power Supply

WARNING: Use only the power adapter supplied with the Dome S3c display unit; the BridgePower BPM150S24F05 (150W) model.

Category	Characteristic Item	Specification
Power input requirements	Voltage selection	Universal auto switching with medical approvals and PFC
	Voltage	100–240V AC
	Current	2.5 A (2.5–1.5 A)
	Frequency	50–60 Hz
Power output requirements	Voltage	24 V DC ±5%
	Current	6.25 A (150 W)
Power consumption	Wattage	66 W LED backlight (typical) 81 W CCFL backlight (typical)
Physical	Size	223.5 mm x 63.5 mm x 38.1 mm (8.8 in x 2.5 in x 1.5 in)
	Weight	0.8 kg (1.8 lb)

Reliability

Characteristic item	Specification
Display	MTBF > 50,000 hours
Backlight	MTBF 50,000 hours to 50% brightness with backlight on continuously

Environment

Characteristic item		Specification
EMI shielding		No emission of low-level radiation
Temperature	Operating range	0° C ~ 40° C
	Storage range	-20° C ~ 60° C
Humidity	Operating range	30% ~ 75% Relative Humidity (noncondensing)
	Storage range	5% ~ 90% Relative Humidity (noncondensing)
Altitude	Operating	2,000 m (6,560 ft) maximum
	Transport/storage	12,000 m (39,400 ft) maximum in unpressurized container

Dome S6c Specification

In locations where 240V outlets are used, connect the Dome S6c display to a center-tapped, 240V, single-phase supply only (for Canada and the United States).

Category	Characteristic Item	Specification
LCD	Technology	TFT AMLCD Dual Domain IPS, 3 subpixels per pixel
	Screen size, diagonal	762 mm (30.0 in.)
	Display resolution (pixels)	3280 x 2048 landscape Dual 1640 x 2048 portrait Dual 1536 x 2048 portrait (future implementation)
	Pixel pitch	197 μm, 129 DPI
	Viewing angle	170° horizontal/vertical
	Response time (Tr+Tf)	30 ms (typical)
	Refresh rate	50 Hz
Optical	Brightness	800 cd/m^2 (typical)
	Contrast ratio	1000:1 (typical)
	DICOM LUT	16-bit architecture with 0.1 JND precision
	Colors supported	Up to 1.07 billion colors; up to 1024 shades of gray, programmable gamma from palette of up to 2041 shades
	Pixel arrangement	Subpixel vertical stripe
Interface	Display control -brightness/ contrast	DDC2B+
	Display identification	EDID read using DDC2B+
	Display status	Dual-stack tricolor LEDs on back panel
Panel Connectivity	Video input	X2 Dual Link DVI-D X1 DisplayPort 1.2 (future feature)
	Video output	X1 DisplayPort 1.1 (future feature)
	Pixel data size	8-bit, 16-bit, 24-bit, and 30-bit per pixel color*
	VGA compatibility	640 x 480 to 1280 x 1024
	USB interface	Mini USB port (used for service)
Physical	Display size (without stand), H x W x D	699 mm x 473 mm x 80 mm (27.5 in. x 18.6 in. x 3.1 in.)
	Display weight (without stand)	10.0 kg (22 lb)
	Display weight (with stand)	13.2 kg (29 lb)
	Mounting option	100 mm x 100 mm VESA mounting standard. Desktop stand capable of height, pivot, swivel, and tilt adjustment.
Power Requirement	Adapter	BridgePower Corp. BPM150S24F05 (150W) model (CAUTION: Use only the adapter supplied with unit.)

* 30-bit color is supported on DisplayPort only.

Power Supply

WARNING: Use only the power adapter supplied with the Dome S6c display unit; the BridgePower Corp. BPM150S24F05 (150W) model. Note that adapter has a power switch.

Category	Characteristic Item	Specification
Power input requirements	Voltage selection	Universal auto switching with medical approvals and PFC
	Voltage	100–240V AC
	Current	2.5 A (2.5–1.5 A)
	Frequency	50–60 Hz
Power output requirements	Voltage	24 V DC ±5%
	Current	6.25 A (150 W)
Power consumption	Wattage	85 W (typical)
Physical	Size	223.5 mm x 63.5 mm x 38.1 mm (8.8 in x 2.5 in x 1.5 in)
	Weight	0.8 kg (1.8 lb)

Reliability

Characteristic item	Specification
Display	MTBF > 50,000 hours
Backlight	MTBF 50,000 hours to 50% brightness with backlight on continuously

Environment

Characteristic item		Specification
EMI shielding		No emission of low-level radiation
Temperature	Operating range	5° C ~ 40° C
	Storage range	-20° C ~ 60° C
Humidity	Operating range	20% ~ 90% Relative Humidity (noncondensing)
	Storage range	10% ~ 90% Relative Humidity (noncondensing)
Altitude	Operating	2,000 m (6,560 ft) maximum
	Transport/storage	12,000 m (39,400 ft) maximum in unpressurized container

Dome S10 Specification

In locations where 240V outlets are used, connect the Dome S10 display to a center-tapped, 240V, single-phase supply only (for Canada and the United States).

Category	Characteristic Item	Specification
LCD	Technology	TFT AMLCD Dual Domain IPS, single 10-bit pixels
	Screen size, diagonal	761 mm (30.0 in.)
	Display resolution	4096 x 2560 pixels (landscape)
	Pixel pitch	157 μm, 161 DPI
	Viewing angle	170° horizontal/vertical
	Response time (Tr+Tf)	35 ms (typical)
	Refresh rate	50 Hz
Optical	Brightness	1250 cd/m^2 (typical)
	Contrast ratio	850:1 (typical)
	DICOM LUT	16-bit architecture with 0.2 JND precision
	Colors supported	Up to 1024 shades of gray, programmable gamma from palette of up to 4096 shades of gray
	Pixel arrangement	Single pixel, IPS structure
Interface	Display control -brightness/ contrast	DDC2B+
	Display identification	EDID read using DDC2B+
	Display status	Dual-stack tricolor LEDs on back panel
	MQSA	2 color bottom facing LEDs on front of unit with push-button activation
Panel Connectivity	Video input	2 Dual Link DVI-D
	Pixel data sizes	8-bit and 10-bit per pixel grayscale, 24-bit color mapped to luminance
	VGA compatibility	640 x 480 to 1280 x 1024
	USB interface	USB B upstream port
Physical	Display size (without stand), H x W x D	699 mm x 473 mm x 80 mm (27.5 in. x 18.6 in. x 3.1 in.)
	Display weight (without stand)	7.7 kg (17 lb)
	Display weight (with stand)	10.9 kg (24 lb)
	Mounting options	100 x 100 mm VESA mounting standard. Desktop stand includes height, pivot, swivel, and tilt adjustment.
Power Requirement	Adapter	BridgePower BPM150S24F05 (with power switch) (CAUTION: Use only the adapter supplied with unit.)

Power Supply

WARNING: Use only the power adapter supplied with the Dome S10 display unit; the BridgePower BPM150S24F05 (150W) model.

Category	Characteristic Item	Specification
Power input requirements	Voltage selection	Universal auto switching with medical approvals and PFC
	Voltage	100–240V AC
	Current	2.5A (2.5–1.5 A)
	Frequency	50–60 Hz
Power output requirements	Voltage	24 V DC ±5%
	Current	6.25 A (150 W)
Power consumption	Wattage	90 W (typical)
Physical	Size	223.5 mm x 63.5 mm x 38.1 mm (8.8 in x 2.5 in x 1.5 in)
	Weight	0.8 kg (1.8 lb)

Reliability

Characteristic item	Specification
Display	MTBF >50,000 hours
Backlight	MTBF 50,000 hours to 50% brightness with backlight on continuously

Environment

Characteristic item		Specification
EMI shielding		No emission of low-level radiation
Temperature	Operating range	10° C ~ 40° C
	Storage range	-20° C ~ 60° C
Humidity	Operating range	30% ~ 75% Relative Humidity (noncondensing)
	Storage range	5% ~ 90% Relative Humidity (noncondensing)
Altitude	Operating	2,000 m (6,560 ft) maximum
	Transport/storage	12,000 m (39,400 ft) maximum in unpressurized container

Windows Video Modes

Resolutions are expressed in pixels, width by height (W x H).

Display	Resolution	Orientation	Color Palette
Dome S3	1536 x 2048	Portrait	32-bit*
	2048 x 1536	Landscape	
Dome S3c	1536 x 2048	Portrait	32-bit†
	2048 x 1536	Landscape	
Dome S6c	3280 x 2048	Landscape	32-bit†
	1640 x 2048 (dual)	Portrait	
	1536 x 2048 (dual)‡	Portrait	
Dome S10	2x 2048 x 2560 (non-span mode)	Portrait	32-bit*
	4096 x 2560 (horizontal span mode)	Landscape	

* 32-bit palette is used for 256 and 1024 shades of gray.
† 32-bit palette is used for16.7 million and 1.06 billion colors.
‡ Future implementation

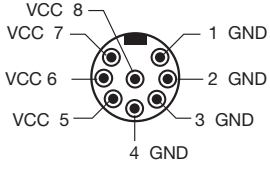
Power Input

Power is supplied to DomeS3c, Dome S6c, and Dome S10 displays via the 6-pin DIN port on the connector plate, and via an 8-pin DIN port on the Dome S3 display. See pin assignments on the following illustrations.

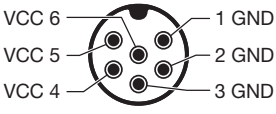
For Dome S3c, Dome S6c, and dome S10, the power input is 24V ±5% (150 W); for Dome S3, 12V ±5% (130 W).

IMPORTANT! Use only the power adapter that ships with the display unit.

Display	DIN Connector	Power Input	Adapter
Dome S3	8-pin	12V ±5% (130 W)	BPC BPM130S12F02 (with power switch)
Dome S3c	6-pin	24V ±5% (150 W)	BPC BPM150S24F05 (with power switch)
Dome S6c	6-pin	24V ±5% (150 W)	BPC BPM150S24F05 (with power switch)
Dome S10	6-pin	24V ±5% (150 W)	BPC BPM150S24F05 (with power switch)



8-pin connector on Dome S3 display



6-pin connector on Dome S3c, Dome S6c, and Dome S10 displays

LED Status Lights

For Dome S3, Dome S3c, and Dome S10, the two LEDs on the back panel provide information on the status of the display.

- LED A describes the digital-link status between the display controller and the interface.
- LED B describes the display-panel status. it shows any faults currently in the panel.

Power-up sequence information from LED

LED A	Action/Sequence	LED B	Action/Sequence
Dark	Initial power-on	Flashing yellow	Initial power-on
Blink yellow	Self test	Solid yellow	Power-on self test
Dark	One (1) second after power -on	Flashing green	Self test pass

LED A status information after initial power-on

LED Status	Description
Solid green	Functional link – normal operation
Flashing yellow	Link working, unrecognized sync information

LED B status information after initial power-on

LED Status	Description
Solid green	Functional system – normal operation
Flashing green	Fault
Solid yellow	DDC power-on, 12V/24V power not detected
Alternating green/yellow	POST failure

NOTE: A red LED or combination of red LEDs indicates a hardware or software fault. Contact Dome Technical Support for assistance.

The LEDs on the back panel of the Dome S6c display provides information about the status of video and power supply connections to the display.

LED A (left) and LED B are located between the power port and the DisplayPort port on the connector plate

The LED A set describes the status of the video connection between the display controller and the display interface.

LED A	Color	Video Cable Connection
Top indicator	Green	Primary DVI connector is plugged into the computer.
Bottom indicator	Green	Secondary DVI connector is plugged into the computer.
Both indicators	Unlit	DVI cables are not connected.

The LED B set describes the source of the power supply.

LED B	Color	Power Supply
Top indicator	Unlit	Unassigned currently.
Bottom indicator	Yellow	Power supply is on from DVI1, DVI2, or USB.
	Green	External power supply is on.

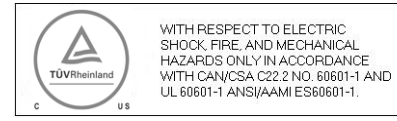
Troubleshooting

Problem	Possible Cause	Solution
No image appears on the screen	Computer is OFF.	Power on the machine.
	Power cord is not securely connected.	Tighten power cord connection and turn on computer.
	Video cable connected incorrectly.	Make sure the first display of a dual-headed system or the only display of a single-headed system is connected to the primary port on the display controller. (NOTE: Both DVI and DisplayPort functions cannot be used at the same time.)
Conflict with driver version	A previous version of the display driver is still installed on the computer system.	Remove any existing display driver before you install a more recent version.
	The installation CD contains a file older than the one currently on your system.	The Confirm File Replace dialog box appears if the installation CD contains a file older than the one currently on the system. Click No to the question, Overwrite the newer file? Or, click No to All.
Unable to set the maximum or native resolution of the display	The function Hide all modes that this monitor cannot display is selected on a subdialog of the Windows Display Properties dialog.	When using commodity graphics boards on Windows XP systems, make sure the check box for the function is empty (unchecked).
	A single-link commodity graphics board is in use.	When using commodity graphics boards with the Dome Sx displays, be sure to install a DualLink DVI graphics board.

Regulatory Compliance

Canada, European Union, United States

This display has been tested and found to comply with IEC 60601-1:2005 and EN 60601-1:2006, and IEC/EN 60601-1-2 standards, and is certified to meet medical standard CAN/CSA C22.2 No. 60601-1-A and UL 60601-1 ANSI/AAMI ES60601-1:2005 (R2012).


TÜVRheinland
C US
WITH RESPECT TO ELECTRIC SHOCK, FIRE, AND MECHANICAL HAZARDS ONLY IN ACCORDANCE WITH CAN/CSA C22.2 NO. 60601-1 AND UL 60601-1 ANSI/AAMI ES60601-1.

Dome S3, Dome S3c, Dome S6c, and Dome S10

The medical display, in addition to meeting medical requirements, has been tested and found to comply with the limits for Federal Communications Commission (FCC) Class A computing devices in a typically configured system since many medical offices are located in residential areas. It is the system integrator's responsibility to test and ensure that the entire system complies with applicable electromagnetic compatibility (EMC) laws.

WARNING! Users of Dome Sx Displays

The Dome S3, Dome S3c, Dome S6c, and Dome S10 displays are Class A products. In a domestic environment, either of these products may cause radio interference, in which case the user may be required to take adequate measures.

Radio transmitting equipment, cellular phones, etc. shall not be used in close proximity of the devices, since this could influence the performance of the device.

Particular precaution must be considered during use of strong emission sources, such as High Frequency surgical equipment and similar, so that, for example, the HF-cables are not routed on or near the devices. If in doubt, contact a qualified technician or your local representative.

This equipment/system is intended for use by healthcare professionals only. This equipment/system may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as reorienting or relocating the Dome Sx display or shielding the location.

We offer state-of-the-art displays suitable to the European market, CE-marked displays based on compliance with counsel directive 93/42/EEC—commonly referred to as the Medical Device Directive (MDD). The following summarizes our qualification of these displays as it relates to compliance with the MDD.

The European Medical Device Directive requires that the intended use of the device be defined. Dome Sx line, models Dome S3, Dome S3c, and Dome S6c are intended for use in displaying and viewing radiography images for review, analysis, and diagnosis by trained medical practitioners. Dome Sx line, model Dome S10 is intended for use in displaying and viewing radiography images for review and analysis by trained medical practitioners, for use in displaying and viewing radiographs of the breast for review and analysis by trained medical practitioners, or for use in diagnostic and mammography display systems. These displays do not provide a measurement function in any way, and it is the device and systems manufacturer's responsibility to verify its function in the integrated device or system.

For Dome S3, the display was classified as required by the MDD according to Annex IX of the directive and the medical device (MEDDEV) guidance available at the time of classification. Because the display uses electrical energy and has no direct patient connections and—by itself—no medical utility, the display is classified according to Rule 12 as an MDD Class I device, component, or accessory. The MDD states that manufacturers of Class I medical devices or accessories shall satisfy the requirements in regard to design and manufacturing controls, that is, the applicable assessment route to be used for CE-marking under the MDD, and it shall carry the CE mark according to Annex XII of the directive, with no Notified Body annotation.

For Dome S6c, the display was classified as Class I medical device required by MDD 93/42/EEC, according to Annex IX Classification Criteria rule 12.

Furthermore, the applicable safety standards for an MDD Class I display are EN 60601-1:2006 and IEC 60601-1:2005. To help the medical device designer evaluate the suitability of these displays, NDSsi has also conducted EMC testing to IEC 60601-1-2 as it can be applied. The display with its power supply alone does not represent a functional medical device. Hence, NDSsi configured a minimal operating system to exercise the display. The resulting data are made available to interested parties.

For Dome S3c and Dome S10 each, the display was classified as required by the MDD 93/42/EEC, according to Annex IX Classification Criteria rule 10, dash three. The above intended use for review, analysis, and diagnosis is a Class IIa medical device. Thus, we believe the Dome S3c and the Dome S10 are Class IIa medical devices, and subject to Notified Body's approval.

Furthermore, the applicable safety standards for an MDD Class IIa display are EN 60601-1:2006 and IEC 60601-1:2005. To help the medical device designer evaluate the suitability of these displays, NDSsi has also conducted EMC testing to IEC 60601-1-2 as it can be applied. The display with its power supply alone does not represent a functional medical device. Hence, NDSsi configured a minimal operating system to exercise the display. The resulting data are made available to interested parties.

This is informative data, not certification data. Certification data must be obtained by the device or system integrator according to Article 12 of the MDD titled "Particular procedure for systems and procedure packs." Paragraph 2 clearly outlines the device or system integrator's responsibility in this matter.

In summary, NDS Surgical Imaging is CE-marking these displays under the Medical Device Directive, which establishes compliance to the basic medical safety standards. However, EMC compliance can only be accomplished in the configured medical device or system and is the responsibility of the device or system manufacturer. NDSsi has the necessary documentation such as IEC 60601-1:2005, EN60601-1:2006, and IEC/EN60601-1-2 and third-party test reports and certifications, a risk management/hazard analysis, an essential requirements checklist, and NDS Surgical Imaging European Community CE marking directive Declaration of Conformity.

NDS Surgical Imaging, located in San Jose, Calif., USA, is the manufacturer of these displays in the meaning of the directive. As required by the MDD in Article 14, NDS Surgical Imaging, not residing in the European Economic Area (EEA), has a European representative, NDS Surgical Imaging—located at Nijverheidscentrum 28, 2761 JP Zevenhuizen (ZH), The Netherlands (phone +31-180-63-43-56; fax +31-180-63-21-91).

In the opinion of NDS Surgical Imaging registration required to put this device into commerce is the responsibility of the medical device/system manufacturer, and NDS Surgical Imaging supports this requirement by providing a European Commission (EC) declaration of conformity. If NDS Surgical Imaging supplies a display to an end user, rather than a device manufacturer, it is the end user's responsibility to ensure continued compliance with the MDD of the system in which the display is integrated.

The supplier will make available on request, circuit diagrams, component part lists, etc.

For vigilance reporting as required under Article 10 of the MDD, NDS Surgical Imaging will provide any information requested by competent authority to support any reported incident investigation by such an authority.

EU Declaration of Conformity for Medical Application

A Declaration of Conformity has been filed for this product. For additional copies of the Declaration of Conformity document, contact NDS Surgical Imaging.

Dome S3 and Dome S6c digital flat-panel displays meet the essential health and safety requirements of, is in conformity with, and the CE marking has been applied according to the relevant EU Directives listed below, using the relevant section of the following EU standards and other normative documents;

EU EMC Directive 2004/108/EC

EU Electromagnetic Compatibility Directive

EN 60601-1-2 Medical Electrical Equipment	Collateral standard electromagnetic compatibility requirements
EN 55011	Limits and methods of measurements for radio interference characteristics of industrial, scientific, and medical equipment
IEC 1000-3-2	Harmonic emissions
IEC 1000-3-3	Voltage fluctuations/flicker emissions
IEC 1000-4-2	Electrostatic discharge requirements for industrial process measurement and control equipment
IEC 1000-4-3	Radiated electromagnetic field requirements for industrial process measurement and control equipment
IEC 1000-4-4	Electrically fast transients for industrial process measurement and control equipment
IEC 1000-4-5	Surge requirements
IEC 1000-4-11	Voltage variations/dips/interrupts
IEC 1000-4-6	Conducted immunity
IEC 1000-4-8	Magnetic field immunity
CE	Conformance to the Medical Device Directive 93/42/EEC
EN 60601-1:2006 Medical Electrical Equipment	Part 1: General requirements for safety

EU Declaration of Conformity for Medical Application

A Declaration of Conformity has been filed for this product. For additional copies of the Declaration of Conformity document, contact NDS Surgical Imaging.

The Dome S3c and Dome S10 digital flat-panel displays meet the essential health and safety requirements of, are in conformity with, and the CE marking has been applied according to the relevant EU Directives listed below, using the relevant section of the following EU standards and other normative documents;

EU EMC Directive 2004/108/EC

EU Electromagnetic Compatibility Directive

EN 60601-1-2 Medical Electrical Equipment	Collateral standard electromagnetic compatibility requirements
EN 55011	Limits and methods of measurements for radio interference characteristics of industrial, scientific, and medical equipment
IEC 1000-3-2	Harmonic emissions
IEC 1000-3-3	Voltage fluctuations/flicker emissions
IEC 1000-4-2	Electrostatic discharge requirements for industrial process measurement and control equipment
IEC 1000-4-3	Radiated electromagnetic field requirements for industrial process measurement and control equipment
IEC 1000-4-4	Electrically fast transients for industrial process measurement and control equipment
IEC 1000-4-5	Surge requirements
IEC 1000-4-11	Voltage variations/dips/interrupts
IEC 1000-4-6	Conducted immunity
IEC 1000-4-8	Magnetic field immunity
CE **0197**	Conformance to the Medical Device Directive 93/42/EEC
EN 60601-1:2006 Medical Electrical Equipment	Part 1: General requirements for safety

U.S. FCC Compliance Statement

Class A Digital Device: Dome S3, Dome S3c, Dome S6c, or Dome S10 Display

This device complies with Part 15 of the FCC Rules.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment under FCC rules.

Model Dome S series needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the ACCOMPANYING DOCUMENTS;

Portable and mobile RF communications equipment can affect the Dome S series.

1. ELECTROMAGNETIC EMISSIONS

Guidance and Manufacturer's Declaration—Electromagnetic Emissions		
The Dome S series is intended for use in the electromagnetic environment specified below. The customer or the user of the display should assure that it is used in such an environment.		
EMISSIONS	COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT–GUIDANCE
RF emissions CISPR 11	Group 1	The Dome S series uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The Dome S series is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Not Applicable	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not Applicable	

WARNING! The use of accessories and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of the Dome S series as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the Dome S series.

2. ELECTROMAGNETIC IMMUNITY

Guidance and Manufacturer's Declaration 211; Electromagnetic Immunity			
The model Dome S series is intended for use in the electromagnetic environment specified below. The customer or the user of the display should assure that it is used in such an environment.			
IMMUNITY TEST	IEC 60601-1:2005 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT–GUIDANCE
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) and neutral	±1 kV line(s) and neutral	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power supply input lines IEC 61000-4-11	<5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles <5 % U_T (>95 % dip in U_T) for 5s	<5 % U_T (>95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 5 cycles 70 % U_T (30 % dip in U_T) for 25 cycles) <5 % U_T (>95 % dip in U_T) for 5s	Mains power quality should be that of a typical commercial or hospital environment. If a dips or an interruption of mains power occurs, the current of the model Dome S series may be dropped off from normal level, it may be necessary to use uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	Not applicable	Not applicable
NOTE: U_T is the AC mains voltage prior to application of the test level.			

3. ELECTROMAGNETIC IMMUNITY

Guidance and Manufacturer's declaration–Electromagnetic Immunity			
The model Dome S series is intended for use in the electromagnetic environment specified below. The customer or the user of the Dome S series should assure that it is used in such an environment.			
IMMUNITY TEST	IEC 60601-1:2005 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT – GUIDANCE
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	3 Vrms 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the Dome S series, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1,2\sqrt{P}$ $d = 1,2\sqrt{P}$ 80 MHz to 800 MHz $d = 2,3\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, (a) should be less than the compliance level in each frequency range; (b) interference may occur in the vicinity of equipment marked with the following symbol:
NOTE 1: At 80 MHz and 800 MHz, the higher frequency range applies. NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.			
(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the model Dome S series is used exceeds the applicable RF compliance level above, the display should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the display. (b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.			
WARNING! The Dome S series should not be used adjacent to or stacked with other equipment.			

4. RECOMMENDED SEPARATION DISTANCES

Recommended Separation Distances
Between Portable and Mobile RF Communications Equipment and the Dome S Series

The model Dome S series is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the display can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the displays as recommended below, according to the maximum output power of the communications equipment.

RATED MAXIMUM OUTPUT POWER OF TRANSMITTER (W)	SEPARATION DISTANCE ACCORDING TO FREQUENCY OF TRANSMITTER (m)		
	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.5 GHz
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Each Dome Sx display has one or more of the following certifications.

China

China Compulsory Certification regulating safety and EMC.
GB4943
GB9254
GB17625

Class A — Dome S3, Dome S3c, Dome S6c, and Dome S10

声　明

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

Germany

TÜV Rheinland GM Mark for medical products.

Japan

Voluntary Control Council for Interference by information technology equipment sold in Japan.

Class A — Dome S3, Dome S3c, Dome S6c, and Dome S10

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＡ情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Class B

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。

Korea

Korea Certification.

NDSsi Dome® Display Products
Warranty and Service Terms and Conditions

STANDARD LIMITED WARRANTY

COVERAGE: NDS Surgical Imaging, LLC (hereinafter "NDSsi") warrants this product to be in compliance with the specifications provided by NDSsi and to be free from defects in material and workmanship as defined in such specifications. Subject to the conditions set forth below, NDSsi agrees to repair or replace any defective part of the enclosed unit for the length of period indicated on the chart below.

NDSSI PRODUCT	STANDARD WARRANTY COVERAGE
Dome® E Series Radiology Displays	• Standard 5-year "repair and return" warranty • 10-year backlight warranty on grayscale displays* • 5-year backlight warranty on color displays† ‡
Dome® S Series Radiology Displays	• Standard 5-year "repair and return" warranty • 10-year backlight warranty on grayscale displays* • 5-year backlight warranty on color displays†
Dome® GX4MP Display	• Standard 5-year "repair and return" warranty • 5-year backlight warranty**
Dome® GX2MP Display VitalScreen® Display	Standard 3-year "repair and return" warranty

* If, within 10 years of initial purchase, the maximum output of the Dome Ex/Dome Sx grayscale display is determined by NDSsi to be less than 300 cd/m^2, NDSsi will repair or replace the display at its sole discretion. The display must have been run at or below the CXtra default brightness setting as configured from the factory.

† If, within 5 years of initial purchase, the maximum output of the Dome Ex/Dome Sx color display (excluding the Dome E4c) is determined by NDSsi to be less than 250 cd/m^2, NDSsi will repair or replace the display at its sole discretion. The display must have been run in native color mode at or below the CXtra default brightness setting as configured from the factory.

‡ If, within 5 years of initial purchase, the maximum output of the Dome E4c color display is determined by NDSsi to be less than175 cd/m^2, NDSsi will repair or replace the display at its sole discretion. The display must have been run in native color mode at or below the CXtra default brightness setting as configured from the factory.

** If, within 5 years of initial purchase, the maximum output of the Dome GX4MP color display is determined by NDSsi to be less than 175 cd/m^2, NDSsi will repair or replace the display at its sole discretion. The display must have been run in native color mode at or below the CXtra default brightness setting as configured from the factory.

EXCLUSIONS – WHAT IS NOT COVERED

1 Any product with a defaced, modified, or removed serial number.

2 Damage, deterioration or a malfunction resulting from accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.

3 Cosmetic damage including, but not limited to scratches, cracks, dents, markings, glue and adhesive residue.

4 Any damage of the product due to shipment.

5 Any damage caused by factors external to the product, such as electric power fluctuation or failure.

6 Normal wear and tear, including backlights dimming over time, or image retention resulting from displaying fixed images for long periods of time.

7 Removal, installation, and set-up service charges.

8 Failures not reported within the warranty term.

9 Any NDSsi products purchased through a distributor, reseller, or medical device manufacturer other than NDSsi (each, an "Intermediary"), where such Intermediary provides direct warranty service to its end-user customers in connection with such product.*

DISCLAIMER

This limited product warranty sets forth your sole and exclusive remedy and NDSsi's sole and exclusive liability under the Standard Limited Warranty described herein.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT.

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* Note that NDSsi sells its products through distributors, resellers, and other medical device manufacturers which prefer to provide their end-user customers with direct warranty support. Contact NDSsi Customer Care to determine if the product that you purchased is covered by this Standard Limited Warranty or whether you need to contact the Intermediary through which you purchased the product for warranty service.

NDSSI'S LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. NDSSI SHALL NOT BE LIABLE FOR THE FOLLOWING:

1 DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

2 ANY OTHER DAMAGES, WHETHER INCIDENTAL, INDIRECT, CONSEQUENTIAL OR OTHERWISE.

3 ANY CLAIM AGAINST THE CUSTOMER BY A THIRD PARTY.

End-users are cautioned that system configuration, software, the application, customer data and operator control of the system, among other factors, affect the product performance. While NDSsi products are considered to be compatible with many systems, specific functional implementation by the customers of the product may vary. Therefore, suitability of a product for a specific purpose or application must be determined by consumer and is not warranted by NDSsi.

This warranty gives you specific legal rights. You may have other rights, which may vary from locality to locality. Some localities do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations might not apply to you.

WARRANTY SERVICE - REPAIR & RETURN – (U.S., LATIN AMERICA, AND CANADA ONLY)

- Our standard warranty service is "Repair and Return". Repair and Return requires the defective unit to be returned to our service location for repair.
- Our service location will repair your unit within ten (10) business days. The service time-period does not include in-transit shipping time to or from our service location.
- Cost of shipment of the defective unit to NDSsi is the responsibility of the customer. Cost of shipment of the repaired unit to Customer is the responsibility of NDSsi (duties and taxes to Canada and Latin America are not included).
- NDSsi reserves the right in its sole discretion to provide Customer with a comparable refurbished replacement unit in lieu of repair of customer's defective unit.
- If NDSsi is unable within a reasonable time to repair or replace the defective unit, it shall refund the purchase price for the product paid by the customer (exclusive of taxes, installation and shipping related fees).
- NDSsi provides a complimentary 90-day Out of Box Failure (OBF) replacement warranty from the date of shipment from NDSsi.

CONTACTING NDSSI CUSTOMER CARE

PRODUCT LINE	Dome®
TOLL FREE	(866) 961-9340
LOCAL	(503) 620-3787
E-MAIL	medicalsupport@ndssi.com
HOURS	6 A.M. – 5 P.M. Pacific Time, Monday – Friday

1 Contact NDSsi Medical Support during the hours listed above. Have your NDSsi model number and serial number available. You may be required to provide proof of purchase as a condition for receiving warranty service.

2 Our representative may perform troubleshooting and diagnosis of the problem by telephone or e-mail. If our representative is unable to fix the problem by telephone or e-mail, we will issue a Return Material Authorization (RMA) for the nonfunctioning unit and provide return instructions.

3 Upon receipt of the returned product, a service technician will evaluate the unit and confirm the failure description provided by the customer.

   (a) If the found failure type is covered under warranty, the repair, parts, labor and shipment back to the customer will be at no charge.

   (b) If the found failure type is not covered under warranty, NDSsi's then current evaluation fee will apply in addition to the cost of parts, labor and the return shipment.

   (c) If the unit is within the warranty period but the customer does not provide a problem description and the service technician cannot determine the failure (no problem found – "NPF") NDSsi's then current evaluation fee will apply in addition to return shipment.

PAYMENT FOR NONWARRANTY EVALUATIONS AND REPAIRS AND OTHER EVALUATION CHARGES: Nonwarranty repairs requested by customer will be performed at NDSsi's then current rates for any nonwarranty repairs and will include applicable evaluation fees and the cost of return shipping (if customer requests that NDSsi ship the repaired product). NDSsi further reserves the right in its sole discretion to request pre-payment for any nonwarranty repairs, NPF evaluations, and return shipping charges prior to return of the product to customer. Any invoiced amount not paid when due shall be subject to a service charge equal to the lesser of one and one-half percent (1.5%) per month or the maximum rate permitted by law. If NDSsi undertakes collection or enforcement efforts, customer shall be liable for all costs thereof, including attorney's fees. NDSsi reserves the right to suspend warranty coverage to any customer who is in default of payment until such payment has been made.

ITEM	ITEM NUMBER	DESCRIPTION
Dome S3 display	933-0993	3-megapixel grayscale display.
Dome S3c display	933-0992	3-megapixel color display.
Dome S6c display	933-1014	6-megapixel color display.
Dome S10 display	933-0989	10-megapixel grayscale display.
Power adapter, 6-pin	902-0176 902-0174	Power block (24V, 150W) with 6-pin DIN connector for use with the Dome S6c display. Power block (24V, 150W) with 6-pin DIN connector for use with the Dome S3c, Dome S6c, or Dome S10 display.
Power adapter, 8-pin	902-0173	Power block (12V, 130W) with 8-pin DIN connector for use with the Dome S3 display.
Power cord, US	903-1160 903-0500	Medical-grade power cord for use in the United States.
Power cord, EU	903-1159 903-0499	Medical-grade power cord for use in the European Union.
Power cord, CN	903-1158 903-0497	Medical-grade power cord for use in China.
DVI cable	903-1161 903-0538	Video cable for use with any Dome Sx display.
DisplayPort cable	903-1138	Video cable for use with the Dome S3 or Dome S3c display.
Mini USB cable	903-1139	Connectivity cable for use with the Dome S10 display.
Quick reference	020-0915	Installation booklet for Dome display systems supported by NVIDIA graphics controllers.

The use of ACCESSORIES, transducers, and cables other than those specified, with the exception of transducers and cables sold by the MANUFACTURER of the ME EQUIPMENT or ME SYSTEM as replacement parts for internal components, may result in increased EMISSIONS or decreased IMMUNITY of the ME EQUIPMENT or ME SYSTEM.

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